ABSTRACT

A counterfeit determination is made with respect to currency bills by illuminating the currency bill with multiple wavelengths of light. Genuine currency bills include indicia printed with an ink that responds similarly to infra-red illumination at two different wavelengths. To identify a test currency as a suspect counterfeit, the bill is first illuminated with infra-red light at a first wavelength. A measurement is then made of a first reflected light response from the first illumination. The test currency bill is then second illuminated with infra-red light at a second wavelength. A measurement is then made of a second reflected light response from the second illumination. The first and second reflected light responses are then compared, and the test currency bill is identified as a suspect counterfeit if the first and second reflected light responses are not substantially the same.